REMARKS/ARGUMENTS

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Claims 1, 3-18, 23, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant Admitted Prior Art (AAPA) in view of Arnold (US 2003/0224729), Lundby (US 6,856,604), and Lin et al. (US 5,832,000, "Lin" hereinafter). Claims 19-22 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin, Lundby, and Arnold.

Response:

Independent claims 1 and 19 have been amended to clarify the process of a receiving peer combining received data blocks which are sent by the transmitting peer as identical data blocks. The applicant submits that none of the prior art references discloses combining received multiple identical data blocks that have become corrupted in order to form a complete copy of the data block.

Claim 1 now recites:

1 (currently amended): A method of communicating data comprising:

providing a first peer and a second peer;

successively transmitting a first predetermined number of more than one identical copies of a data block with a first transmitter of the first peer;

receiving at least two of the first predetermined number of identical copies of the data block with a second receiver of the second peer;

combining more than one corrupted received data blocks of the identical copies of the data block to form a complete copy of the data block at the second receiver of the second peer;

transmitting a response to the first peer when reconstructing a complete instance

of the data block from the identical copies of the data block at the second receiver with a second transmitter of the second peer; and

not transmitting a negative acknowledgement to the first peer when receiving corrupted received data block at the second receiver with the second transmitter of the second peer.

Claim 19 recites:

19 (currently amended): A receiving peer of a communications system comprising:

a second antenna coupled to a first antenna of a transmitting peer via a transmission medium;

a second receiver electrically connected to the second antenna for receiving data blocks;

a second processor electrically connected to the second receiver for combining more than one data blocks sent by the first antenna as identical copies of a data block received successively to form a complete copy of the data block; and

a second power supply electrically connected to the second receiver and the second processor; and

a second transmitter,

wherein the second transmitter transmits a response to the transmitting peer when the second processor forms a complete copy of the data block from the identical copies of the data block; and the second transmitter does not transmit a negative acknowledgement to the transmitting peer when the second receiver receives a corrupted data block.

No new matter is added through the amendments to claims 1 and 19. These claim amendments are supported in paragraph [0027] of the instant application, which is copied below:

According to the present invention method, the processors 61, 71 **control the transmitters 62, 72 to successively transmit a predetermined**

number of identical instances of each data block to be sent. For simplicity, assume that the peer 60 is transmitting and the peer 70 is receiving. Rather than sending a given data block only once, the processor 61 controls the transmitter 62 to send the data block several times without waiting for indication of a negative acknowledgement or time out. Thus, suitable delays between successive transmissions range from substantially no delay to roughly the expected duration for acknowledgement. At the receiving peer 70, **the receiver 74 is capable of merging several corrupted blocks to properly reconstruct the sent data block.** Since the main purpose in sending the same data block successively is to counter the effects of a noisy transmission environment, the predetermined number can be selected according to expected noise levels.

On the other hand, none of the cited prior art references discloses the feature of taking corrupted copies of multiple identical data blocks and using them to reconstruct a complete copy of the data block. The AAPA does not disclose reconstructing multiple copies of a data block to form a complete data block. In Figures 1 and 2 of the AAPA, a request is either received correctly or it is not. No data blocks are combined. In Figures 3 and 4 of the AAPA, if a received data block is corrupted, the receiver simply waits for the data block to be correctly received later. Therefore, there is no combining of multiple corrupted data blocks taught by the AAPA.

Lin discloses in column 4, line 17 that message 422 is an error-tolerant message, and therefore there is no need to combine more than one corrupted received data blocks. In other words, even if the error-tolerant message 422 is corrupted, Lin can reconstruct the original message 402 from the corrupted error-tolerant message 422 by an inverse error-correction algorithm (steps 604 and 608). Therefore, Lin does not disclose "combining more than one corrupted received data blocks to form...."

Furthermore, Lin does not disclose a receiver receiving multiple **identical** data blocks from a transmitter and combining the multiple identical data blocks to reconstruct the original data block. Lin does not indicate that any of the by-products of error-tolerant message 422 are identical.

In addition, none of the cited prior art references teaches **transmitting a response** after reconstructing a complete instance of the data block from the identical copies of the data block.

The AAPA teaches transmitting a response in Figure 1, but this does not take place after reconstructing a data block. In addition, Lin does not teach sending a response after reconstruction either.

Therefore, for the above reasons, the applicant respectfully submits that claims 1 and 19 are patentable over the cited prior art references since none of the prior art references discloses combining received multiple identical data blocks that have become corrupted in order to form a complete copy of the data block, and none of the cited references teaches transmitting a response after reconstructing a complete instance of the data block from the identical copies of the data block.

Claim 13 recites:

13 (previously presented): A transmitting peer of a communications system comprising:

a first antenna coupled to a second antenna of a receiving peer via a transmission medium;

a first transmitter electrically connected to the first antenna for transmitting data blocks;

a first receiver electrically connected to the first antenna for receiving a response

from the receiving peer;

a first processor electrically connected to the first transmitter for controlling the first transmitter to successively transmit a first predetermined number of more than one identical copies of a data block via the first antenna; and

a first power supply electrically connected to the first transmitter and the first processor;

wherein the first processor is capable of detecting an expected response of the data block at the first receiver, and accordingly **stopping the successive transmission of identical copies of the data block at the first transmitter before the first transmitter finishes transmitting the first predetermined number of more than one identical copies of the data block**.

This stopping feature is explained in paragraph [0031] of the instant application and shown in Figure 7, "*In the example illustrated by Fig.7, peer 70 may choose to stop transmission of the fifth instance of data block B if the first receiving instance of data block C is error free.*"

On the other hand, the AAPA does not disclose stopping the successive transmission of identical copies of the data block at the first transmitter before the first transmitter finishes transmitting the first predetermined number of more than one identical copies of the data block if the expected response is received at the first receiver. The AAPA discloses in paragraph [0008] sending a DEMAND REJECT message if a received DEMAND REQUEST message is unsatisfactory. However, the DEMAND REQUEST message is not a message that is successively transmitted multiple times. Instead, only one instance of the DEMAND REQUEST message is sent at a time before receiving either a DEMAND REJECT message or a DEMAND RESPONSE message in return.

Therefore, the AAPA and the other cited prior art references do not teach the claimed feature of stopping the successive transmission of identical copies of the

data block at the first transmitter before the first transmitter finishes transmitting the first predetermined number of more than one identical copies of the data block if the expected response is received at the first receiver. Thus, for the above reasons, the applicant submits that claim 13 is patentable over the cited prior art references.

Claims 3-12, 14-18, 20-23, and 25-27 are dependent on claims 1, 13, and 19, and should be allowed if their respective base claims are allowed. Reconsideration of claims 1, 3-23, and 25-27 is respectfully requested.

Conclusion

Thus, all pending claims are submitted to be in condition for allowance with respect to the cited art for at least the reasons presented above. The Examiner is encouraged to telephone or email the undersigned if there are informalities that can be resolved in a phone conversation or through email correspondence, or if the Examiner has any ideas or suggestions for further advancing the prosecution of this case.

In view of the claim amendments and the above arguments in favor of patentability, the applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Sincerely yours,

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